



Canoe News - November 8, 2008

By Clint Thomas, THE CANADIAN PRESS

TORONTO - Astronauts circling high above the earth should expect a call from four Toronto college students who have surpassed expectations by coupling a simple-looking antenna with a complex communications device capable of contacting the International Space Station.

For more detail see their blog: [www.operationfirstcontact.com](http://www.operationfirstcontact.com) <<http://www.operationfirstcontact.com/>>

With their antenna perched atop the roof of Humber College scanning the sky, the students are awaiting an official plan from NASA after receiving initial approval from the space agency in September.

Operation First Contact is the graduating project for 34-year-olds Gino Cunti and Paul Je of Toronto, Patrick Neelin, 25, of Welland, Ont., and Kevin Luong, 21, of Mississauga, Ont.

The project got off the ground about a year ago as the senior-year students looked for a way to apply knowledge gained from their radio communication courses.

"What better way (than) to contact a space station?" Cunti said.

The wireless and telecommunication program students are in the final stages of building two communications systems to make contact with the space station.

"This has never been accomplished by students at the college level anywhere that we know of," said Prof. Mark Rector, who noted only about a dozen professional radio engineers or graduate-level university engineering students have previously been successful.

While school contacts with the space station are routinely made through the Amateur Radio on the International Space Station (ARISS) program, many of those contacts are made using a traditional ham radio.

"In their case, yes, it is out of the ordinary," Canadian ARISS team member Daniel Lamoureux said of the fact the students have designed and built their own system.

"All the requirements were met. They'll get their contact."

Contacting the station is no small achievement given that it's 440 kilometres from Earth and travelling at nearly 28,000 kilometres an hour. Thus, the window for contact is narrow.

continued on page 6

**LARC SENATE**

Keith Fiske VE3JQ  
 Pat Doherty VE3PD  
 Dave Kimpton VE3AVS  
 Laurie Bridgett VE3BCD  
 Terry Stewardson VA3LU  
 Ed Baumann VE3SNW

**ABOUT US**

The :Lakehead Amateur Radio Club (LARC) is an incorporated not for profit group of amateur radio operators in the Thunder Bay area that meet for self education, community service and fellowship. Our meetings are the second Thursday of the month at room 191 McIntyre Building, Confederation College, 7:30 PM. Our postal address is 1100C Memorial Ave. Suite 184, Thunder Bay, Ontario P7B 4A3. This newsletter is published monthly except for July and August by Ed Baumann VE3SNW and questions and submissions may be emailed to [ve3snw@shaw.ca](mailto:ve3snw@shaw.ca)

**LARC EXECUTIVE**

President  
 Vacant  
 Vice-President  
 Bob Hansen VE3RVA 767-6924  
 Secretary  
 Karl VE3RRP  
 Treasurer  
 Joe Coghlan VE3TBX 344-6566  
 Directors  
 Brad Harris VE3MXJ 767-0628  
 Randy Gottfred VA3OJ 474-0910  
 Doug VE3EFC  
 Brian Bolt VE3BCQ  
 Past President  
 Bill Unger VE3XT

**Lakehead Amateur Radio Club  
 Treasurer's Report**

Balance on Hand - October 1, 2008    **\$5,969.36**

**Income**

Memberships	\$640.00
50/50 Draw	\$7.00
Bank Interest	\$0.05
Donation - in lieu of membership	\$35.00

Total Income                                **\$682.05**

**Expenses**

Thunder Bay Telephone	\$47.61
Bank Service Charges	\$1.50

Total Expenses                                **\$49.11**

Balance on Hand - Nov. 5, 2008        **\$6,602.30**

Joe Coghlan - VE3TBX  
 Treasurer

**LARC Emergency Coordinator**

VA3OJ Randy Gottfred 474-0910

**ARES District Emergency  
 Coordinator**

VE3FAL Fred Lesnick 577-0789

**Assistant**

VE3MXJ Brad 767-0628

**CANWARN**

VA3JMS John 767-3631

VE3MXJ Brad 767-0628

**Public Service Events**

VE3MXJ Brad 767-0628

VA3JMS John 767-3631

**Amateur Radio**

**Accredited Examiner**

VE3FAL Fred Lesnick 577-0789

[lesnick@tbaytel.net](mailto:lesnick@tbaytel.net)

**LARC OPEN ACCESS REPEATERS**

VE3YQT(Mount Baldy)147.060 (-600) Phone Patch

VE3TBR (St. Joseph's) 145.490 (-600) (100.0 Hz)  
 442.075 (+5 MHz)  
 144.390 APRS

VE3BGA (Hillcrest H.S.) 145.450 (-600) (IRLP Node VA3LU 123.0 Hz)  
 442.825 (+5 MHz) (100.0 Hz)  
 VE3UPP Upsala 145.470 (-600)

## North East Regional Directors Report October 2008



The monthly meeting of the Regional Directors was held on September 30, 2008 starting at 2330Z.

Most of the meeting was taken up with ordinary housekeeping issues but there were a few items of interest discussed.

After doing an exceptional job as Treasurer, David Parks, VE3AV asked to be replaced. Effective October 1 Ronald Vadeboncoeur, VE3REV is the new Treasurer. His term ends December 2009.

Gord Kosmenko, VE6SV of Sherwood Park, AB has agreed to take on the "Coordinator of Philanthropy". This entails encouraging Amateurs to remember RAC if they wish to forward the interests of Amateur Radio in Canada.

If you are interested in further details on the meeting contact me.

Several years ago Industry Canada no longer required us to pay a yearly fee. The good news it's cheaper to be an Amateur in Canada. Unfortunately no one knows how many Amateurs there are, as many Silent Keys go unreported to IC. Also if you know of anyone who has moved and not reported their new address to IC please ask them to do so. If you go to the following site you can search by location for Amateurs in any specified city. <http://www.callsign.ca/ville.php> Please note this site is not on the IC web page.

Once you type in your town of interest you will obtain a listing of all licensed Amateurs there. If you notice any Silent Keys that are still listed there is a procedure to have them removed from the list. Many communities' local papers have an online obituary listing. A copy of that is sufficient for IC, or a letter from the family will also suffice. Once you have all the data an email to the Amateur Radio Service Center is all that is left. Their address is [Spectrum.amateur@ic.gc.ca](mailto:Spectrum.amateur@ic.gc.ca) If you wish I can do the emails if you supply me with the information.

If we all do a little we can help upgrade the callsign data list. Thanks.

I have also sent and received a reply from Dalton McGuinty regarding possible changes to the Highway Traffic Act regarding the use of electronic devices while driving. I want to get us on the radar in case any changes are made.

And finally, no one opposed me as Director so my term is now extended for 2 more years. I want to thank each of you for your support and help.

If you have any questions or concerns please email me at [ve3xt@rac.ca](mailto:ve3xt@rac.ca).

73

Bill VE3XT  
North East Ontario  
Regional Director

Ed's Note: A couple of years ago, I mailed out a flyer to all the hams on the Industry Canada database in the Thunder Bay area. A significant number of them were returned as undeliverable. You must advise the government (aka Industry Canada) within **thirty days** of a change of address. Failing to do so can result in a fine, and a criminal record. No more bingo at Grand Portage. Please do it now.

### For Sale

Radio Tubes including 807's ,1646, 5Y4 contact Dave Brown 475-4599, 1017 Isabella Street East, Thunder Bay.

70 Foot tower, worth \$750 new, free to whoever wants to lower it. Contact Lorne Vaillant 935-2475 in Murillo.

### Wanted

I'm looking for older 2-m rig to put in garage - preferably base unit (120VAC) but would also look at mobile - just need 147.060 in it to monitor VE3YQT - no bells and whistles - Tks es 73 de ve3avs (344-8949 or [ve3avs@rac.ca](mailto:ve3avs@rac.ca))

## 75th Anniversary Committee

The 75th Anniversary Committee met in October and had a very productive meeting. One of the ideas is to apply for a special call sign prefix that can be used by the club membership. The only catch is that it can only be used for 1 month. April has been suggested as the anniversary month... we could have an operating award for contacting "X" number of club members... any suggestions or comments for awards, QSL cards or activity month??

What in your opinion were the major events of each 25 year span (i.e. the first 25 yrs, the second 25 yrs etc.) of club history?

Also whatever happened to...

The Brass Doorknob Award?  
The W L Harris award for fox hunting?

The next 75th anniversary committee meeting is Wednesday November 19th at 7:30 PM, McIntyre Building, Confederation College. Everyone is welcome. Please email Karl VE3RRP at ve3rrp@rac.ca with suggestions, ideas and comments.

## Congratulation To.....

Donald R Kannegiesser VA3DOK who has achieved his advanced amateur status and  
Cliff Pratt VA3CLF who is now basic plus.

## Lakehead Amateur Radio Club Meeting

October 9, 2008

Vice President, Bob Hansen VE3RVA Presided.

### Treasurer's Report:

Norm VE3XRC moved to accept the report as printed in the October Hi-Q. Seconded by Mike VE3ZG. Passed Unanimously.

### Minutes of Previous Meeting:

Ken VE3ESZ moved to accept the September meeting's minutes as printed in the October Hi-Q. Seconded by Clarence VE3WCW. Passed Unanimously.

### Old Business:

Ham Classes - Bill VE3XT reported that the college will provide space, course advertising in the Key, and "nominal printing" for a charge of about \$50.00 per student. The deadline for the Key was fast approaching, and we had to determine the cost of classes for the deadline.

A discussion about the different possibilities ensued. Moved by Karl VE3RRP, seconded by Norm VE3XRC, that a nominal \$50.00 fee be charged each student for the ham radio course, to be held at the college from January 2009 to March 2009. The price will include issues of Hi-Q, and the students can be considered as associate members to August 31, 2009. Passed Unanimously.

### Public Service:

#### Coming Events:

Rotary Christmas Parade on Saturday November 15th.  
Sibley Ski Tour in 2009.  
Trillium Event in November, 2008.

**CanWarn:-** No severe weather in September.

### Communication Trailer:

We are still looking for a place to store the trailer (under cover) and still be accessible for the winter.

**RAC Regional Director:** Our Past President, Bill VE3XT is the RAC Northwest Ontario Regional Director. He will hold the position for two years.

### Annual Dinner:

Our annual dinner needs a new organizer. Bob VE3RVA is stepping down after organizing it for 10 years. Please consider volunteering to take on this event.

50/50 Draw winner: Al VE3AMY

Adjournment moved by Norm VE3XRC.  
73,

Minutes submitted by  
Karl VE3RRP

# The Amateur Radio Emergency Service *from our friends at NASA...*

## NATIONAL HF EMCOMM FREQUENCIES

RAC has suggested these frequencies and tactical designations for use during real or simulated emergencies.

See the webpage at <http://www.rac.ca/fieldorg/racares.htm> for more information about ARES, or contact Randy VA3OJ or Fred VE3FAL

<b>SSB Frequencies</b>	<b>Tactical</b>
75 M - 3.675 MHz LSB	Alpha
40 M - 7.135 MHz LSB	Bravo
20 M - 14.135 MHz USB	Charlie
17 M - 18.135 MHz USB	Delta
15 M - 21.235 MHz USB	Echo
10 M - 28.235 MHz USB	Foxtrot

<b>CW Frequencies</b>	<b>Tactical</b>
80 M - 3.535 MHz	Golf
40 M - 7.035 MHz	Hotel
20 M - 14.035 MHz	India
17 M - 18.075 MHz	Juliett
15 M - 21.035 MHz	Kilo
10 M - 28.035 MHz	Lima

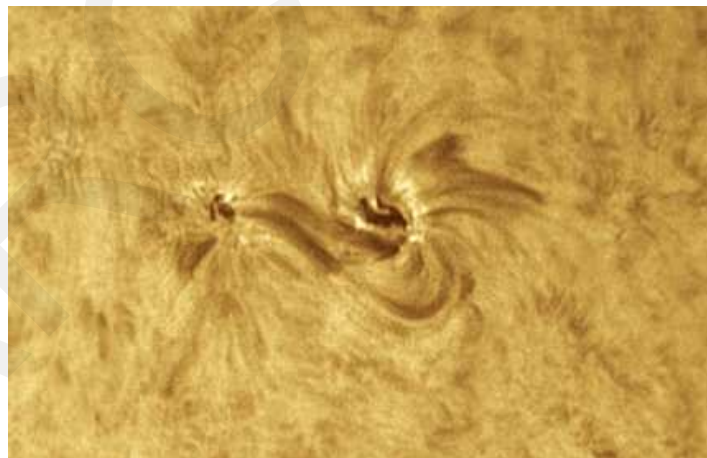
<b>Digital Frequencies</b>	<b>Tactical</b>
80 M - 3.596 MHz	Mike
40 M - 7.096 MHz	November
20 M - 14.096 MHz	Oscar
17 M - 18.096 MHz	Papa
15 M - 21.096 MHz	Quebec
10 M - 28.096 MHz	Romeo

The Sun Shows Signs of Life - November .07 2008

Nov. 7, 2008: After two-plus years of few sunspots, even fewer solar flares, and a generally eerie calm, the sun is finally showing signs of life.

"I think solar minimum is behind us," says sunspot forecaster David Hathaway of the NASA Marshall Space Flight Center.

His statement is prompted by an October flurry of sunspots. "Last month we counted five sunspot groups," he says. That may not sound like much, but in a year with record-low numbers of sunspots and long stretches of utter spotlessness, five is significant. "This represents a real increase in solar activity."



The biggest of the new-cycle spots emerged at the end of the month on Halloween. Numbered 1007, or "double-oh seven" for short, the sunspot had two dark cores each wider than Earth connected by active magnetic filaments thousands of kilometers long. Amateur astronomer Alan Friedman took this picture from his backyard observatory in Buffalo, New York:

### Space Weather Links

[www.ises-spaceweather.org](http://www.ises-spaceweather.org)  
[www.sec.noaa.gov](http://www.sec.noaa.gov)  
[www.ips.gov.au](http://www.ips.gov.au)  
[www.sidc.oma.be/index.php3](http://www.sidc.oma.be/index.php3)  
[www.hirweb.nict.go.jp/index.html](http://www.hirweb.nict.go.jp/index.html)  
[www.cbk.waw.pl/rwc/rwc.html](http://www.cbk.waw.pl/rwc/rwc.html)  
[www.rwcprague.ufa.cas.cz/](http://www.rwcprague.ufa.cas.cz/)  
[www.estec.esa.nl/wmwww/spweather/](http://www.estec.esa.nl/wmwww/spweather/)  
[www.spacew.com/](http://www.spacew.com/)  
[www.spaceweather.com/](http://www.spaceweather.com/)

[www.lmsal.com/solarsites.html](http://www.lmsal.com/solarsites.html)  
[www.exploratorium.edu/learning\\_studio/auroras/happen.html](http://www.exploratorium.edu/learning_studio/auroras/happen.html) [www.space-science.com/](http://www.space-science.com/)  
[www.nso.edu/](http://www.nso.edu/)  
[www.sohowww.nascom.nasa.gov/](http://www.sohowww.nascom.nasa.gov/)  
[www.umbra.nascom.nasa.gov/](http://www.umbra.nascom.nasa.gov/)  
[www.lmsal.com/](http://www.lmsal.com/)  
[www.bbso.njit.edu/](http://www.bbso.njit.edu/)  
[www.superdarn.jhuapl.edu/](http://www.superdarn.jhuapl.edu/)  
[www.solar.ifa.hawaii.edu/](http://www.solar.ifa.hawaii.edu/)  
[www.helios.izmiran.troitsk.ru/](http://www.helios.izmiran.troitsk.ru/)



"From the acquisition of signal ... up until the time where we lose the actual space station, it's going to be roughly about 10 minutes," Cunti said.

Plenty of research and development hours were spent bringing the idea to life.

"We had to develop our own antenna, we had to develop our own synchronization of the antenna with the space station," Cunti said, adding the system mimics what NASA is doing now.

Rector was skeptical when the group first approached him with the idea.

"I was a little leery that they could pull it off," said Rector, who at first sent the students away to do research into several questions he had. "In a few weeks, they came back with an awful lot of answers."

There is still some work to be done. The backup system must still be completed, and the group must raise, align and calibrate their primary antenna, which should be ready in two weeks.

The next test is to try and follow a satellite with the system.

"If we can listen in and actually pick up and track the satellite, then transmission in the other direction should be - should be - a piece of cake," Rector said.

The students are hopeful their big moment to make contact will happen before their graduation in May. The likely window is between January and March, Rector said.

Prior to that, NASA officials will inspect the system to ensure it meets specifications. One requirement is possession of a ham radio licence, which Cunti currently holds.

The group has also decided to stimulate interest on campus by holding a school-wide contest. They will select the best question to ask the astronauts as submitted by fellow students, with the winner given the opportunity to speak to the astronauts.

The students also hope to bring in a Canadian Space Agency official to the school in January to talk about the space station, and plan to set up a large screen and broadcast the big event live at the college.

"This project is a tribute to the talents of our students and their faculty adviser that they have tackled this complex initiative," said Humber College president John Davies. "I have no doubt that they will achieve their goal."

As they get closer to earning their diplomas, Cunti has already started a satellite installation business and hopes to continue in the radio communications field. Neelin wants to pursue a career in radio and television broadcasting, while Je and Luong plan to venture into the wireless field.

"We're applying what we learned," Je said. "It shows that this college actually teaches us life skills."

#### More solar weather links:

[www.aari.nw.ru/index\\_en.html](http://www.aari.nw.ru/index_en.html)  
[www.aari.nw.ru/clgmi/geophys/pc\\_main.htm](http://www.aari.nw.ru/clgmi/geophys/pc_main.htm)  
[www.aari.nw.ru/clgmi/geophys/k\\_ind.htm](http://www.aari.nw.ru/clgmi/geophys/k_ind.htm)  
[www.aari.nw.ru/clgmi/geophys/mag\\_main.htm](http://www.aari.nw.ru/clgmi/geophys/mag_main.htm)  
[www.space.rice.edu/ISTP/](http://www.space.rice.edu/ISTP/)  
[www.sunkl.asu.cas.cz/~sunwatch/](http://www.sunkl.asu.cas.cz/~sunwatch/)  
[www.alpha.npi.msu.su/RSWI/rswi.html](http://www.alpha.npi.msu.su/RSWI/rswi.html)  
[www.sunspot.noao.edu/](http://www.sunspot.noao.edu/)  
[www.dmiweb.dmi.dk/fsweb/solar-terrestrial/](http://www.dmiweb.dmi.dk/fsweb/solar-terrestrial/)  
[www.swdcdb.kugi.kyoto-u.ac.jp/](http://www.swdcdb.kugi.kyoto-u.ac.jp/)  
[www.ngdc.noaa.gov/stp/](http://www.ngdc.noaa.gov/stp/)  
[www.hiraiso.nict.go.jp/](http://www.hiraiso.nict.go.jp/)  
[www.tango.cetp.ipsl.fr/~isgi/lesdonne.htm](http://www.tango.cetp.ipsl.fr/~isgi/lesdonne.htm)

[www.gfz-potsdam.de/pb2/pb23/niemegk/kp\\_index/](http://www.gfz-potsdam.de/pb2/pb23/niemegk/kp_index/)  
[www.sunbase.nict.go.jp/solar/denpa/index.html](http://www.sunbase.nict.go.jp/solar/denpa/index.html)  
[www.drao.nrc.ca/icarus/www/sol\\_home.shtml](http://www.drao.nrc.ca/icarus/www/sol_home.shtml)  
[www.magaxpl.msfc.nasa.gov/](http://www.magaxpl.msfc.nasa.gov/)  
[www.spaceweather.com/java/sunspot.html](http://www.spaceweather.com/java/sunspot.html)  
[www.spervis.oma.be/spervis/](http://www.spervis.oma.be/spervis/)  
[www.esa-spaceweather.net/index.html](http://www.esa-spaceweather.net/index.html)

# November 2008

Mon	Tue	Wed	Thu	Fri	Sat	Sun
send your calendar notices to ve3snw@shaw.ca	When was the last time you checked in on the ARES net on 3.750 Mhz ?		Thursdays are coffee night at Boston on Arthur.		1	2
3	4	5	6	7	8	9
10	11	12	13 LARC MEETING	14	15 Christmas Parade	16
17 Trillium Exercise	18	19	20	21	22	23
24	25	26	27	28	29	30 <i>only 24 days until Christmas</i>